

Tetrahedron Letters Vol. 51, No. 47, 2010

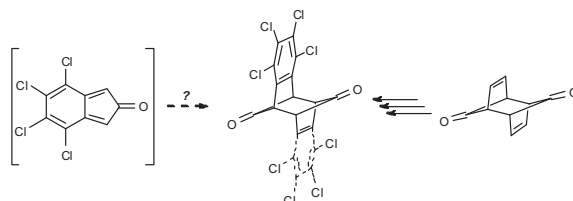
Contents

COMMUNICATIONS

From the *anti*-tricyclo[4.2.1.1^{2,5}]deca-3,7-diene framework to 4,5,6,7-tetrachloro-isoindenone derivatives

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Markus Etzkorn*, Steven D. Smeltz-Zapata, Tiffany B. Meyers, Xin Yu, Michael Gerken



A halide-initiated aza-Baylis–Hillman reaction: generation of unnatural amino acids

pp 6078–6081

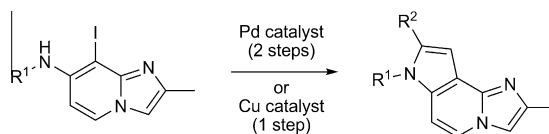
Lindsey O. Davis, Suzanne L. Tobey*



Short and efficient access to imidazo[1,2-*a*]pyrrolo[3,2-*c*]pyridine derivatives

pp 6082–6085

Vincent Gaumet*, Emmanuel Moreau, Abbas Taleb, Fernand Leal, Johan Neyts, Jan Paeshuyse, Claire Lartigue, Olivier Chavignon, Alain Gueiffier, Jean-Claude Teulade, Jacques Métin, Jean-Michel Chezal



A simple, solvent and catalyst-free green synthesis of novel *N*-[(1*H*-indol-3-yl)arylmethyl]heteroarylamines

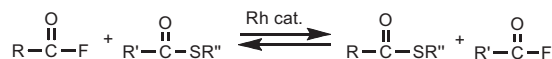
pp 6086–6089

Abolfazl Olyaei*, Bahareh Shams, Mahdieh Sadeghpour, Fatemeh Gesmati, Zeinab Razaziane

**Rhodium-catalyzed interconversion between acid fluorides and thioesters controlled using heteroatom acceptors**

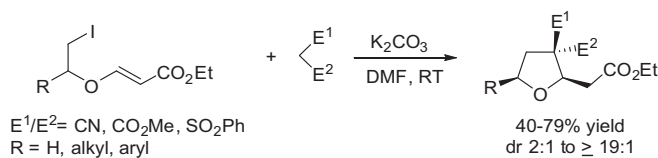
pp 6090–6092

Mieko Arisawa, Toru Yamada, Masahiko Yamaguchi*

**Tandem S_N2-Michael addition to vinylogous carbonates for the stereoselective construction of 2,3,3,5-tetrasubstituted tetrahydrofurans**

pp 6093–6097

Santosh J. Gharpure*, S. Raja Bhushan Reddy

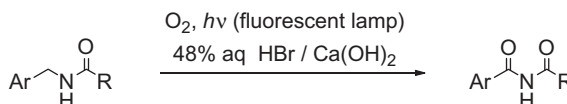


A stereoselective method for the synthesis of substituted tetrahydrofuran derivatives employing a tandem alkylation-Michael addition sequence to vinylogous carbonates is developed. The method is extended to the synthesis of adjacent *bis*-THFs.

Aerobic photooxidation of benzylamide under visible light irradiation with a combination of 48% aq HBr and Ca(OH)₂

pp 6098–6100

Norihiro Tada, Kazunori Ban, Momoko Yoshida, Shin-ichi Hirashima, Tsuyoshi Miura, Akichika Itoh*

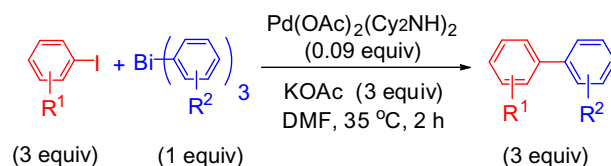


Benzylamides were found to be oxidized to their corresponding diacylamines in the presence of molecular oxygen, catalytic 48% aq HBr, and Ca(OH)₂ under visible light irradiation of a fluorescent lamp.

Pd-catalyzed coupling of aryl iodides with triarylbiaryls as atom-economic multi-coupling organometallic nucleophiles under mild conditions

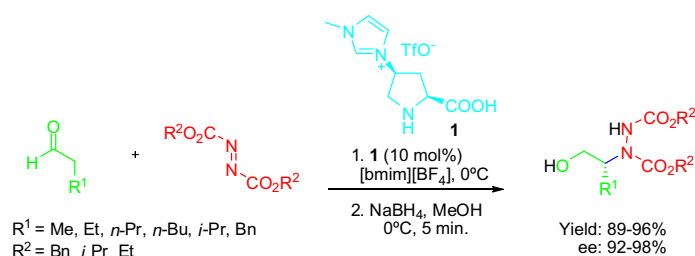
pp 6101–6104

Maddali L. N. Rao*, Debasis Banerjee, Ritesh J. Dhanorkar

**Direct asymmetric α -amination of aldehydes with azodicarboxylates in ionic liquids catalyzed by imidazolium ion-tagged proline organocatalyst**

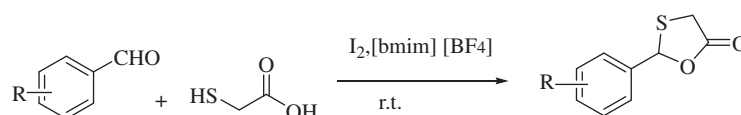
pp 6105–6107

Xiong Ding, Hong-Lai Jiang, Cheng-Jian Zhu*, Yi-Xiang Cheng

**Molecular iodine in [bmim][BF₄]: a highly efficient green catalytic system for one-pot synthesis of 1,3-oxathiolan-5-one**

pp 6108–6110

Manika Dewan, Ajeet Kumar, Amit Saxena, Arnab De, Subho Mozumdar*

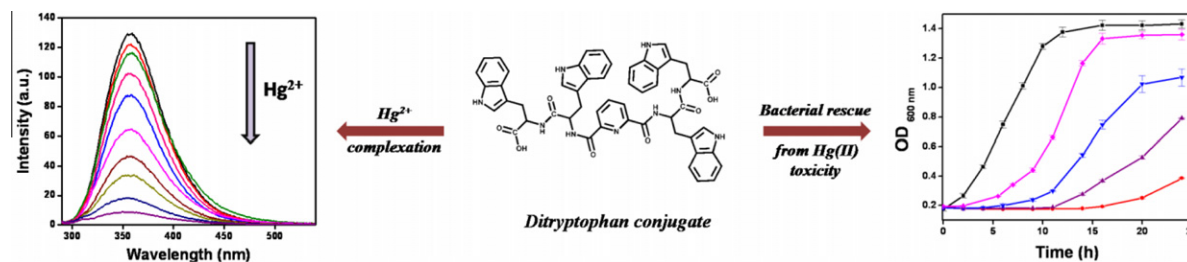


Aldehydes and mercaptoacetic acid are coupled in the presence of a catalytic amount of economical and non-toxic molecular iodine in [bmim][BF₄] ionic liquid under mild conditions to afford the corresponding 1,3-oxathiolan-5-one in excellent yields. Molecular iodine acts faster in ionic liquids when compared to conventional solvents such as DMSO, DMF, ethyl acetate, and acetonitrile. The recovered ionic liquids can be recycled in subsequent reactions with consistent activity.

A synthetic ditryptophan conjugate that rescues bacteria from mercury toxicity through complexation

pp 6111–6115

Sudipta Mondal, Shiv Swaroop, Ramanathan Gurunath*, Sandeep Verma*



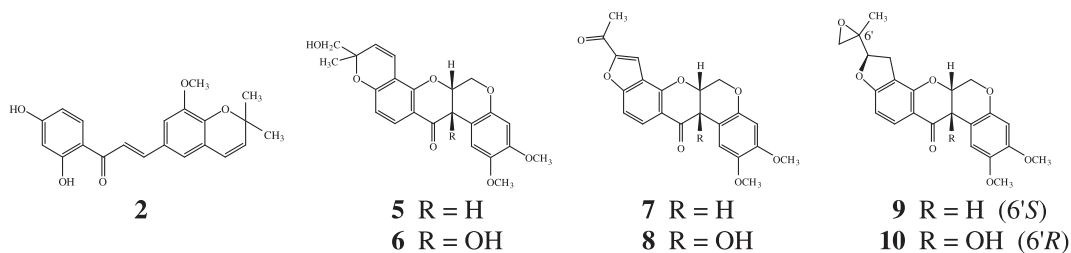
A pyridine-ditryptophan conjugate's interaction with mercury (II) was studied. This conjugate was found to rescue *E. coli* DH5 α cells from mercury toxicity.



A single chalcone and additional rotenoids from *Lonchocarpus nicou*

pp 6116–6119

Martin A. Lawson, Mourad Kaoudji*, Albert J. Chulia



Lonchocarpus nicou roots lipophile extract afforded further metabolites (chalcone **2**, hydroxyrotenoids **5–6**, 7'-nor-6'-oxo-2',3'-dehydrorotenoids **7–8** and 6',7'-epoxyrotenoids **9–10**) of which **2**, **6**, and **7** are new and **5**, **9**, and **10** are reported for the first time in the plant kingdom.

Synthetic and computational studies on liphagal: a natural product inhibitor of PI-3K

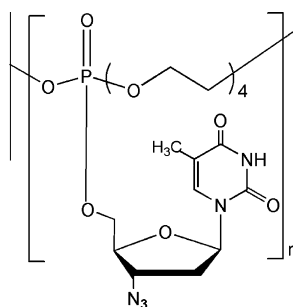
pp 6120–6122

Yanzhong Zhang, E. Zachary Oblak, Erin S. D. Bolstad, Amy C. Anderson, Jerry P. Jasinski, Ray J. Butcher, Dennis L. Wright*

**On the design of polymeric 5'-O-ester prodrugs of 3'-azido-2',3'-dideoxythymidine (AZT)**

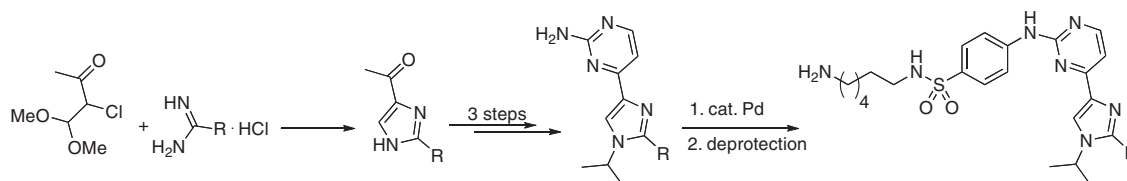
pp 6123–6125

Kolio D. Troev*, Violeta A. Mitova, Ivan G. Ivanov

**Concise, flexible syntheses of 4-(4-imidazolyl)pyrimidine cyclin-dependent kinase 2 (CDK2) inhibitors**

pp 6126–6128

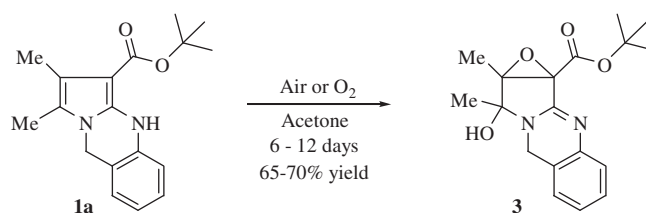
Mathieu Toumi, Marion Barbazanges, Sebastian H. B. Kroll, Hetal Patel, Simak Ali, R. Charles Coombes, Anthony G. M. Barrett*



Aerobic epoxidation and hydroxylation of a pyrrolo[2,1-b]quinazoline under ambient conditions

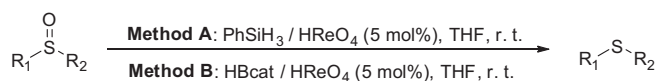
pp 6129–6131

Ryan A. Hawkins, Chad E. Stephens*

**Reduction of sulfoxides catalyzed by oxo-complexes**

pp 6132–6135

Ivânia Cabrita, Sara C. A. Sousa, Ana C. Fernandes*

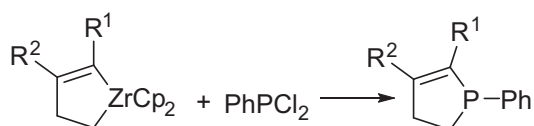


The two novel catalytic systems PhSiH₃/HReO₄ (5 mol %) and HBcat /HReO₄ (5 mol %) proved to be highly efficient and chemoselective for the reduction of sulfoxides at room temperature.

Preparation of 2-phospholene derivatives from zirconacyclopentenes

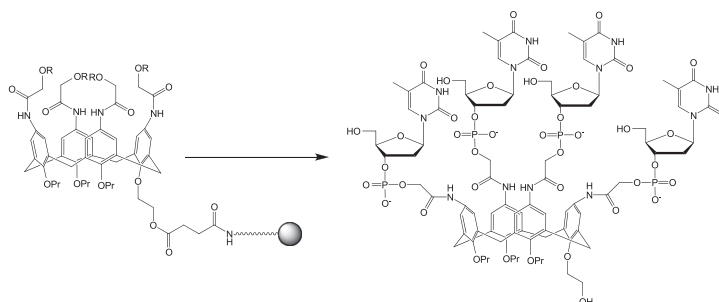
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Yiqing Zhou, Xiaoyu Yan, Chanjuan Xi*

**Polymer supported calixarene derivative useful for solid-phase synthesis application**

pp 6139–6142

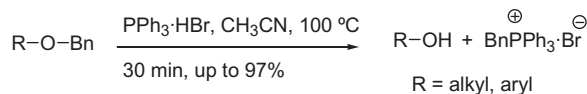
Giuseppe Granata, Grazia M. L. Consoli*, Sebastiano Sciuto, Corrada Geraci*



Cleavage of benzyl ethers by triphenylphosphine hydrobromide

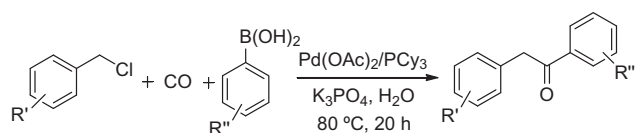
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Mani Ramanathan, Duen-Ren Hou*

**Palladium-catalyzed carbonylative coupling of benzyl chlorides with aryl boronic acids in aqueous media**

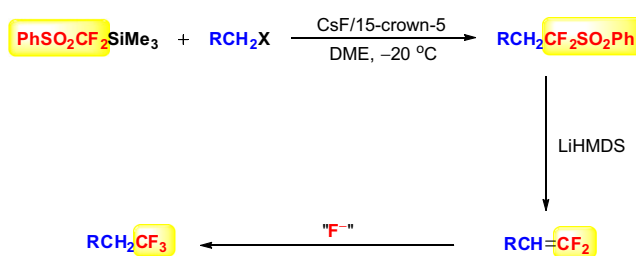
pp 6146–6149

Xiao-Feng Wu, Helfried Neumann, Matthias Beller*

**Nucleophilic (phenylsulfonyl)difluoromethylation of alkyl halides using PhSO₂CF₂SiMe₃: preparation of gem-difluoroalkenes and trifluoromethyl compounds**

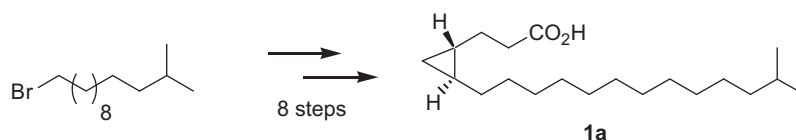
pp 6150–6152

Lingui Zhu, Ya Li, Yanchuan Zhao, Jinbo Hu*

**The first total synthesis of the (±)-17-methyl-*trans*-4,5-methyleneoctadecanoic acid and related analogs with antileishmanial activity**

pp 6153–6155

Néstor M. Carballeira*, Nashbly Montano, Rosa M. Reguera, Rafael Balaña-Fouce

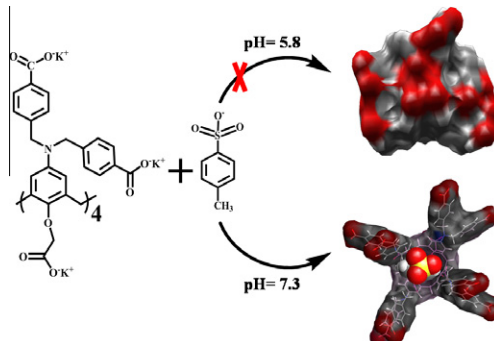


The first total synthesis of the marine cyclopropane fatty acid (±)-17-methyl-*trans*-4,5-methyleneoctadecanoic acid (**1a**) was accomplished in eight steps and in 9.1% overall yield starting from 1-bromo-12-methyltridecane. The *cis* isomer was cytotoxic to *Leishmania donovani* promastigotes (IC₅₀ = 300.2 ± 4.2 μM).

Aminocalix[4]arene: the effect of pH on the dynamics of gate and portals on the hydrophobic cavity

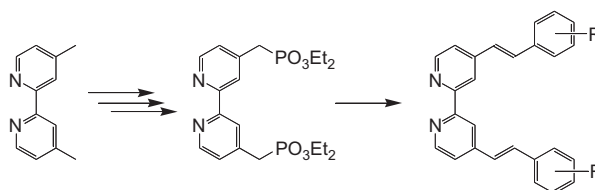
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Satish Balasaheb Nimse, Keum-Soo Song, Junghoon Kim, Hyung-Sup Kim, Van-Thuan Nguyen, Woon-Young Eoum, Chan-Yong Jung, Van-Thao Ta, Taisun Kim*

**Convenient synthesis of functionalized 4,4'-disubstituted-2,2'-bipyridine with extended π -system for dye-sensitized solar cell applications**

pp 6161–6165

Cédric Klein, Etienne Baranoff, Md. Khaja Nazeeruddin*, Michael Grätzel

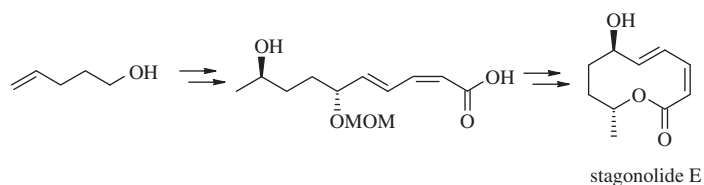


Based on the Horner–Emmons–Wadsworth reaction, a convenient synthetic route for the extension of the π -system on 4,4'-disubstituted-2,2'-bipyridines was used to develop a novel series of functionalized ligands for DSC applications.

Stereoselective total synthesis of stagonolide E

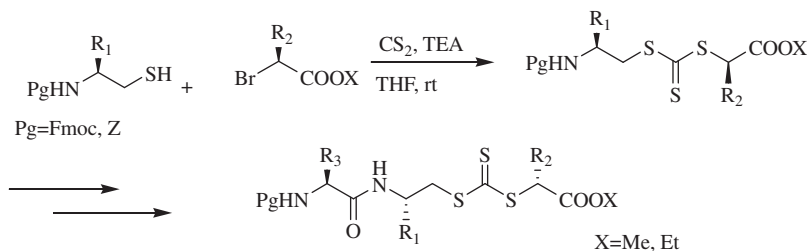
pp 6166–6168

Gowravaram Sabitha*, P. Padmaja, P. Narayana Reddy, Surender Singh Jadav, J. S. Yadav

**An efficient one-pot access to trithiocarbonate-tethered peptidomimetics**

pp 6169–6173

N. Narendra, H. S. Lalithamba, Vommina V. Sureshbabu*

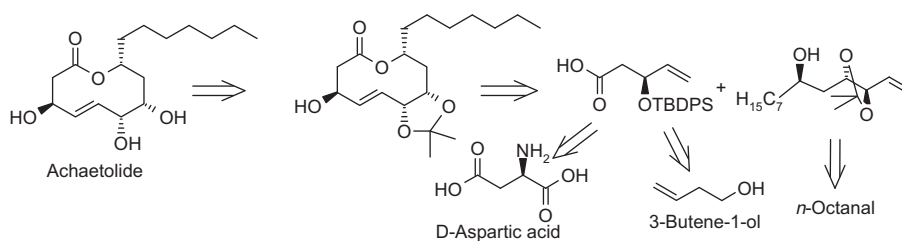


Synthesis of trithiocarbonate-linked peptidomimetics and neoglycosylated amino acids is described. Further, the protocol is also extended for the synthesis N,N' -orthogonally protected trithiocarbonate-linked dipeptidomimetics.

Stereoselective total synthesis of achaetolide and reconfirmation of its absolute configuration

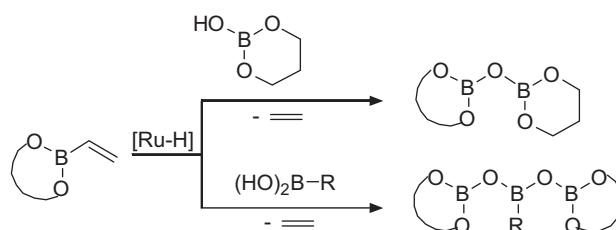
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P. Srihari*, B. Kumaraswamy, P. Shankar, V. Ravishashidhar, J. S. Yadav

**A new catalytic method for the synthesis of boroxanes**

pp 6177–6180

Jędrzej Walkowiak, Bogdan Marciniec*

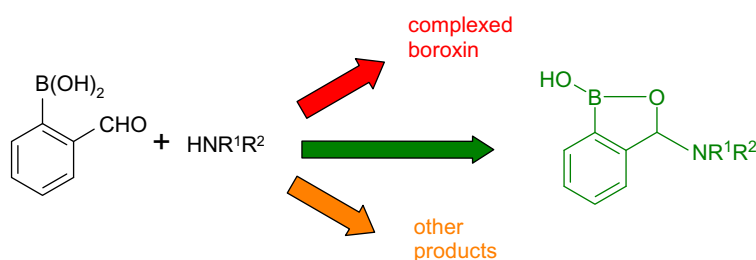


A new Ru-H complex catalyzed O-borylation of boronic acids with vinylboronates leading to boroxane bond formation with evolution of ethylene is described.

**Diverse reactivity of 2-formylphenylboronic acid with secondary amines: synthesis of 3-amino-substituted benzoxaboroles**

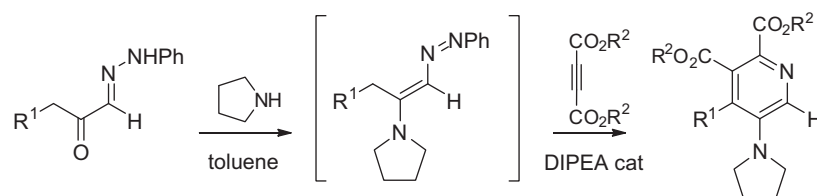
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Agnieszka Adamczyk-Woźniak, Izabela Madura, Aldrik H. Velders, Andrzej Sporzyński*

**A new pyridine synthesis from azoenamines**

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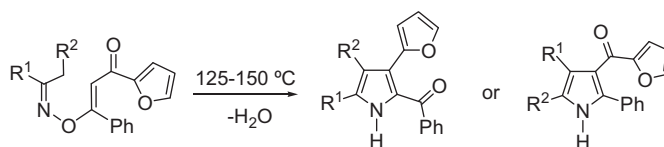
Didier Coffinier, Laurent El Kaim*, Laurence Grimaud, Simon Hadrot



Synthesis of O-2-(acyl)vinylketoximes and their unusual rearrangements into 2- and 3-acyl-substituted pyrroles

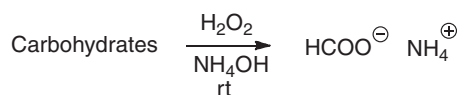
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Tatyana E. Glotova, Elena Yu. Schmidt, Marina Yu. Dvorko, Igor' A. Ushakov, Al'bina I. Mikhaleva, Boris A. Trofimov*

**Oxidative degradation of reducing carbohydrates to ammonium formate with H₂O₂ and NH₄OH**

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Prasanna Pullanikat, Sangmook J. Jung, Kyung Soo Yoo, Kyung Woon Jung*

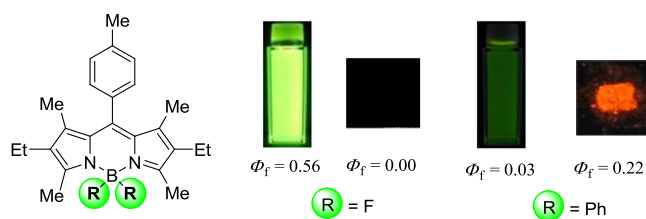


Various reducing carbohydrates were efficiently converted into ammonium formate under environment friendly and mild conditions in aqueous media.

**Strategy for the increasing the solid-state fluorescence intensity of pyromethene-BF₂ complexes**

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Yasuhiro Kubota*, Jun Uehara, Kazumasa Funabiki, Masahiro Ebihara, Masaki Matsui*

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Corrigenda

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*Corresponding author

+ Supplementary data available via ScienceDirect

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